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ABSTRACT

It is generally agreed that increased acceptance may be expected when members of different groups interact on an equal status basis, in an atmosphere of goodwill toward men. This study was planned to examine the proposition that the effects of interracial association on tolerance and acceptance of other group members depends upon the circumstances under which the association occurs. Carried out in an elementary school that had experienced massive integration in the middle of the school year, the study was run in 2 parts: the first concerned sociometric choices of pupils and the second concerned interactions of black and white pupils in the classroom. Both sociometric and interaction data revealed a strong tendency for members of each group to prefer to associate with other members of their own race. Furthermore, this tendency was not improved by a year of association in a school situation that appeared to have ideal conditions for fostering interracial acceptance. Yet, although equal status association may not eliminate the cleavage between races, it may eliminate much of the hostility that has been fostered by unequal status non-association. (Author/TA)

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Changes in Sociometric Choices Following Forced Integration of an Elementary School

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In The Nature of Prejudice, Allport wrote, "No corner of the world is free from group scorn. Being fettered to our respective cultures, we . . . are bundles of prejudice" (1954, p.4). This statement is no less true today than it was 17 years ago, despite the massive efforts to overcome racial prejudice in this country. We may hazard a guess that one of the reasons these efforts have not been more successful is that the forces supporting prejudice are ill-defined and poorly understood. Indeed, there seems to be a pervasive faith that mere association will lead to favorable interracial attitudes. The implicit assumption inherent in many desegregation plans is that the major determinant of interracial hostility and conflict is lack of knowledge and understanding of the other group. If only members of opposite groups could get to know each other, hostility would be reduced or eliminated and members of the two groups would become friends.

This simplistic notion of interracial attitudes is also apparent in many investigations of the effects of contact between racial groups. However, empirical evidence from many sources demonstrates conclusively that association, contact, familiarity, and similar factors do not automatically lead to better racial relations. After reviewing the evidence concerning the effects of contact, Allport concluded that prejudice "may be reduced by equal status contact between majority and minority groups in the pursuit of common goals"

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(Allport, 1954, p.281). Fourteen years later, Carithers reviewed studies dealing with the effects of interracial contact in desegregated schools and concluded that "There is no general agreement about the effects of interracial contact on attitude change. Some studies have found heightened tolerance; some heightened resistance; some no change. There seems to be, however, a general agreement that interracial contact per se will not bring about increased tolerance or acceptance." (Carithers, 1970, p. 41).

The important point made by these and other writers (e.g., Proshansky, 1966) is that the effects of interracial association on tolerance and acceptance of other group members depend upon the circumstances under which the association occurs. It is generally agreed that increased acceptance may be expected when members of different groups interact on an equal status basis in an atmosphere of goodwill toward men. The present study was planned to examine this general proposition.

The Physical and Social Setting

The study was carried out in an elementary school that had experienced massive integration in the middle of the school year. The school employs the team-teaching approach in which teams of from three to six teachers are responsible for the total educational experience of from 90 to 130 pupils. Each team and its pupils occupy a "quad" consisting of four classrooms opening onto a centrium. Even before the massive integration of the school, the faculty was integrated. The assistant principal of the school is black, and the proportion of black-white teachers is approximately the same as the proportion of black-white teachers in the total school system (roughly 25 blacks to 75 whites). Every teaching team has black members and two of

the six team leaders are black. Relations among the teachers are unusually good. Prior to the massive integration there were some black pupils in the school, but the number was small. After integration, there were 142 black and 627 white pupils in the school. Socioeconomic status of blacks was approximately equal to that of whites, based upon occupation of fathers and residential areas.

This set of circumstances would seem to meet most of the requirements for improving interracial tolerance and acceptance through association. The open system in which teachers of both races interact on an equal status basis, the lack of rigid controls on interactions within the classroom, and the generally friendly relations among black and white teachers, all favor the establishment of acceptant attitudes among pupils of different groups. The only potentially negative factor is that the pupils had no choice as to the school that they would attend.

The investigation of the effects of integration on racial tolerance and acceptance was conducted in two parts. The first part concerned sociometric choices of pupils, whereas the second part concerned interactions of black and white pupils in the classroom.

The Sociometric Study

Sociometric questionnaires were administered to all pupils in the fourth, fifth, and sixth grades in February 1970 (soon after integration had occurred), and again in June 1970. The same questionnaire was administered to fifth and sixth grade pupils in February 1971. The sociometric questionnaire contained the following statements:

The persons I <u>most</u> prefer to be with in my quad are:

The persons I <u>least</u> prefer to be with in my quad are:

Pupils were asked to list three persons in response to each statement.

For February and June, 1970, data were obtained from 19 blacks and 74 whites in the fourth grade, 17 blacks and 67 whites in the fifth grade, and 14 blacks and 42 whites in the sixth grade, for a total of 50 blacks and 182 white pupils.

In the February 1971 follow-up, data were obtained from 22 blacks and 83 whites in the fifth grade and from 13 blacks and 46 whites in the sixth grade. These were the same students who were in fourth and fifth grades in 1970.

In all groups the relative number of girls and boys was about equal. Since there was no significant sex difference, this variable was ignored in subsequent treatments of the data.

Distribution of Choices

The data were first examined to determine the distribution of black-white choices between the two racial groups. Figure 1 shows the most preferred choices of members of the other race by fourth, fifth, and sixth

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Figure 1 about here

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grade pupils. The open bars show the choices in February 1970 and the hashed bars show choices in June 1970. The dashed lines indicate choices that would be expected by chance. It can be seen that both blacks and whites choose members of the other race significantly less frequently than would be expected ($p < .001$, in each instance).

Choices were also examined to determine whether there was a significant shift from February to June. A shift was defined as any change in

the ratio of black to white choices. Very few shifts occurred (22 of 50 blacks and 22 of 182 whites) and there was no significant difference in the direction of the shifts, although shifts tended to be in the direction of more frequent choice of own race. Obviously, proportionately more blacks shifted than whites ($\chi^2 = 24.00$, $p < .001$).

Figure 2 shows the distribution of rejections (least preferred choices).

Figure 2 about here

Rejections of whites by blacks are less than chance in all cases, and significantly so in all cases except February choices by sixth grade pupils (p .05 or better). White rejections of blacks are less consistent. Significant differences from chance expectations occur only for February choices by fourth graders and for June choices by fifth grade pupils ($p < .001$ in both cases). Fourth graders rejected significantly <u>fewer</u> blacks than expected, whereas fifth graders rejected significantly <u>more</u> blacks than expected by chance.

Again, there were relatively few shifts from February to June (13 of 50 blacks and 66 of 182 whites). Shifts by blacks were about equally distributed between shifts to same and other race (6 vs. 7), whereas 49 whites shifted to greater rejection of blacks as compared with 17 who shifted to greater rejection of whites ($\chi^2 = 14.56$, $p < .001$).

Figure 3 shows the distributions of most preferred choices for the follow-up sample of fifth and sixth graders in February 1971. As in the

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Figure 3 about here

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earlier data, both blacks and whites chose members of the other race significantly less than members of own race ($p < .001$ in all cases). The tendancy to choose members of own race therefore persisted over the 1970-71 academic year. Again, shifts were nonsignificant.

Rejections for the three time periods represented by the follow-up sample are shown in Figure 4. Considering only the February 1971 choices,

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Figure 4 about here

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it is found that all choices differed significantly from chance expectations ($p < .05$ or better). Blacks rejected whites below chance expectations, whereas whites rejected blacks more than expected by chance.

More shifting of choices occurred between June 1970 and February 1971 than between February 1970 and June 1970. Hence, it was possible to examine shifts within grade levels. In the fourth grade, 13 blacks shifted to greater rejection of whites as compared with 2 who shifted to greater rejection of blacks ($\chi^2 = 6.66$, $p < .01$). In the sixth grade, shifts by blacks were in the opposite direction; ten shifted to greater rejection of own race as compared with two who shifted to greater rejection of whites ($\chi^2 = 4.08$, $p < .05$).

Although there was a tendency for whites in both grades to shift to greater rejection of members of own race, there was no significant difference (fifth grade, 26 vs. 22; sixth grade, 20 vs. 11).

Summary and Discussion

The sociometric data may be summarized as follows:

1. Both blacks and whites at all three grade levels choose significantly more members of their own race than members of the other race.

2. Blacks reject whites significantly less than would be expected by chance. This effect increases over time for older pupils.

3. Initially, whites reject blacks less frequently than chance, but shift to greater than chance rejection of blacks.

Taken together, these data provide little support for the hypothesis that equal status association will lead to greater acceptance of members of another race. On the contrary, it appears that association with members of the other race, at least in the school studied, leads to less acceptance of members of the other race. In the case of older black pupils, the reaction appears to be one of withdrawal; they both choose and reject members of their own race more than members of the other race.

The Interaction Study

The purposes of the interaction study were (1) to determine the degree to which preferences revealed by the sociometric data were reflected in social interaction, and (2) to determine the degree to which biracial interactions are related to age level. Numerous studies have reported a link between age and various interracial phenomena. Criswell (1937) found that preferences for own race varied with grade in school; Dwyer (1958) reported that the lower the age the more accomodating were students; and Landreth and Johnson (1953) found that interracial patterns became more distinct with increased age. On the other hand, Proshansky (1966) noted that changes in intergroup behavior and intergroup attitudes occur without much relationship to each other.

Procedure

The interaction study was carried out in the same elementary school as the sociometric study. Two observers counted the number of black-white interactions and the number of same-race interactions (black-black and white-white) during the last week of January and the month of February, 1971. Each quad (or grade level) was observed for a period of ten minutes once per week for a period of five weeks. Observations were made in a given quad on the same day each week, during a "free period" in which pupils were permitted to move about freely and interact with whomever they desired, so long as their behavior did not become disruptive.

The two observers tabulated any interaction that was observed, without regard to the quality of the interaction. Preliminary observations had indicated that very few aggressive or hostile interactions could be identified, either because they did not occur or because it was impossible to accurately judge the quality of interactions. Interactions were tabulated by means of finger counters which observers concealed in their pockets. The overall correlation between tallies made by the two observers was .72, which is respectable when it is remembered that they were counting the interactions of 90 to 130 pupils in an area equivalent to five classrooms.

Results and Discussion

The data were analyzed in terms of per cent of total interactions that were interracial. We had expected that this percentage would decrease with increasing age as reflected in grade level. This relationship is shown in Figure 5. Analysis of variance revealed a highly significant difference

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Figure 5 about here

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between grade levels in per cent of black-white interactions ($F = 6.20$; $df = 5.24$; $p < .001$). Grades four and five deviate from the expected linear relationship. However, it is apparent that this percentage score could be affected by the number of blacks relative to whites who were present at the time the observations were made. Although the chance expectancies of same-race versus different-race interactions are approximately equal, evidence presented by Gottlieb and TenHouten (1965) suggests that cross-racial interactions decrease as the number of blacks equals that of whites. We therefore examined this relationship, with the results shown in Figure 6. The rank order correlation between means for grade levels was -.885; when the

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Figure 6 about here

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correlation was based upon all periods of observation, which is not entirely legitimate, a Pearson r of -.65 was obtained. Even when the effects of absolute number of blacks present was partialed out, an r of -.56 remained. All of these values are highly significant ($p < .001$).

An analysis of covariance was computed, using percentage of blacks in attendance as the covariate. This analysis yielded an $F = 1.64$, which falls far short of significance ($df = 5,23$). In other words, the relationship between age and/or grade level and percentage of black-white interactions can be accounted for entirely on the basis of the correlation between the age-grade variable and the relative proportion of blacks and whites present in

the classroom. In the school studied, at least, cross-racial interactions appear to be a function of the size of the minority relative to the size of the majority group.

This finding has important implications for the interpretation of age-linked relationships reported in other studies, as well as methodological implications for future research. With respect to earlier studies of the age variable, it is possible that the findings could be due to uncontrolled variations in minority-majority size. Only one study was found that presented data in a form that permitted an examination of this relationship. This was an article by Criswell (1937) which reported that preferences for own race varied with grade level. In the schools studied by Criswell, whites were in the minority, with the percentage of whites in a given classroom varying from nine to fifty-three. Usable data were available from 28 classrooms. The correlation between percentage of whites and per cent preferences for members of other race was computed to be -.50 ($df = 26$; $p < .01$). This finding is, of course, in agreement with our findings.

From a methodological point of view, it is incumbent upon the researcher to control for minority-majority proportions in any study dealing with the relationship between age and cross-racial phenomena.

Finally, it is important to note that our data are consistent with other data concerning racial relations. Early sociological studies (e.g., Coon, 1951; Richmond, 1950; Weaver, 1946) revealed that racial prejudice varies directly with the density of the minority population. The study by Gottlieb and TenHouten (1965) revealed a similar relationship. Even so, it is interesting to note that this relationship holds for a relatively narrow range

of minority population density, and that it exerts its effect even when variations in relative minority size occur within the same group.

The reasons for the relationship between density of minority population and cross-racial interactions is not at all clear. At least four possibilities present themselves: (1) The presence of a relatively large proportion of members of one's own race provides greater opportunity for same-race interaction, assuming that there exists a proclivity in that direction. (2) The presence of a high proportion of minority group members makes them more visible to the majority and hence arouses whatever negative feelings the majority members may have toward the minority. (3) The presence of a relatively small proportion of the minority may arouse feelings of sympathy toward them in some majority members. (4) The reduced relative size of the minority could be produced by the absence of the less accepting and acceptable minority group members and/or the presence of the less accepting and acceptable majority group members. Of these possibilities, only the last one could be refuted by available data. Examination of attendance records for the days observations were made revealed that the density of the majority was unrelated either to the absence of the most rejected blacks or to the presence of the most rejecting whites, as determined by sociometric data.

One final note concerning cross-racial interactions: In every grade, the percentage of black-white interactions was significantly below chance expectancy ($p < .001$). This finding is in accord with the sociometric data.

Concluding Statement

The data from these two studies present a gloomy picture of the effectiveness of school integration as a means of improving interracial acceptance

and tolerance. Both sociometric data and interaction data reveal that interracial exchanges are below the level of chance, thus revealing the strong tendency for members of each group to prefer to associate with the other members of their own race. Furthermore, this tendency is not improved by a year of association in a school situation that appears to have ideal conditions for fostering interracial acceptance. But before we become too pessimistic, let us note that neither sociometric choices nor interactions were zero; on the contrary, both measures indicated a considerable amount of interracial activity. It should be remembered, too, that most of the interactions between blacks and whites were friendly, at least in the judgment of the author and the two observers. In conclusion, equal status association may not eliminate the cleavage between races, but it may eliminate much of the hostility between races that has been fostered by unequal status non-association.

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Table 1

Chi Squares for Differences Between Observed Choices and Expected Choices (Sociometric Study 1)

	February 1970	June 1970
Most Preferred Choices		
4th Grade:		
Black Choices	35.18***	53.13***
White Choices	36.67***	21.43***
5th Grade:		
Black Choices	110.30***	165.27***
White Choices	13.19***	31.82***
6th Grade:		
Black Choices	52.12***	108.12***
White Choices	30.42***	32.72***
Least Preferred Choices		
4th Grade:		
Black Choices	19.03***	26.33***
White Choices	17.19***	2.02
5th Grade:		
Black Choices	24.93***	28.83***
White Choices	0.89	51.16***
6th Grade:		
Black Choices	2.40	5.28*
White Choices	2.21	1.12

* $p < .05$
*** $p < .001$

Table 2

Chi Squares for Differences Between Observed Choices and Expected Choices

(February 1971)

	Most Preferred	Least Preferred
5th Grade:		
Black Choices	165.70***	148.50***
White Choices	31.48***	6.66**
6th Grade:		
Black Choices	127.69***	66.05***
White Choices	30.64***	5.77*

* $p < .05$

** $p < .01$

*** $p < .001$

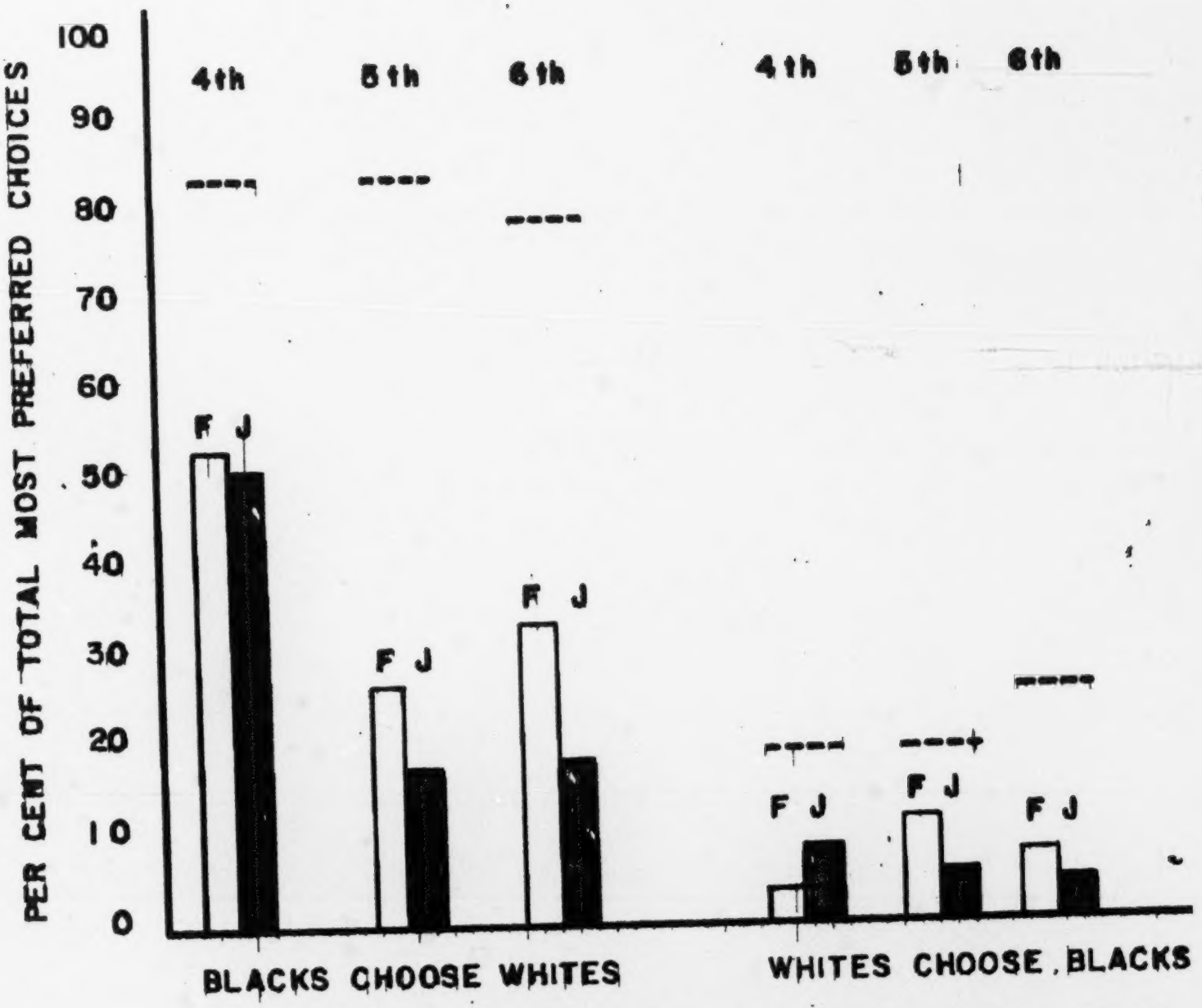

Figure I. Most Preferred Choices of Members of Other Race

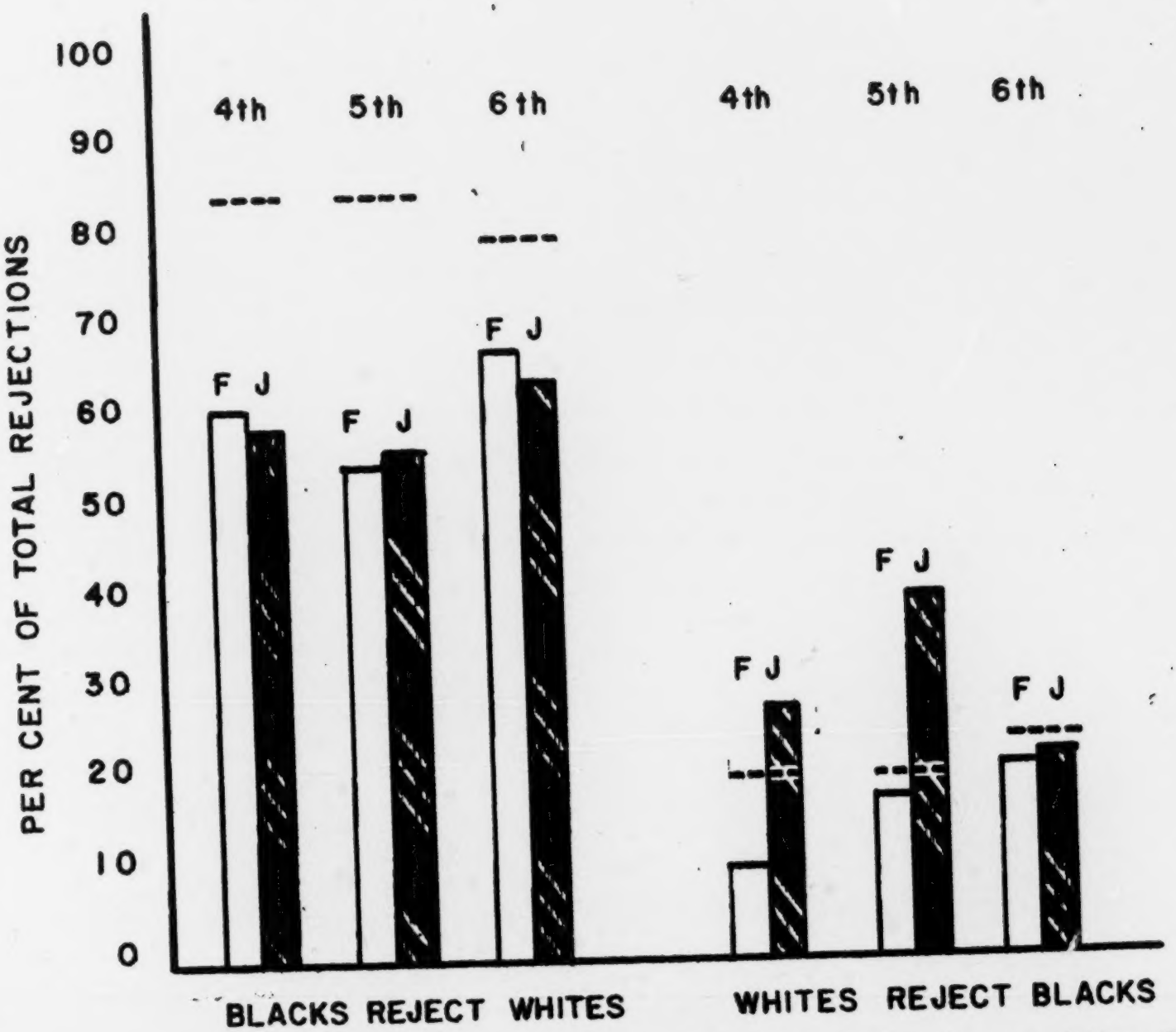

Figure 2. Least Preferred Choices (rejections) of Members of Other Race

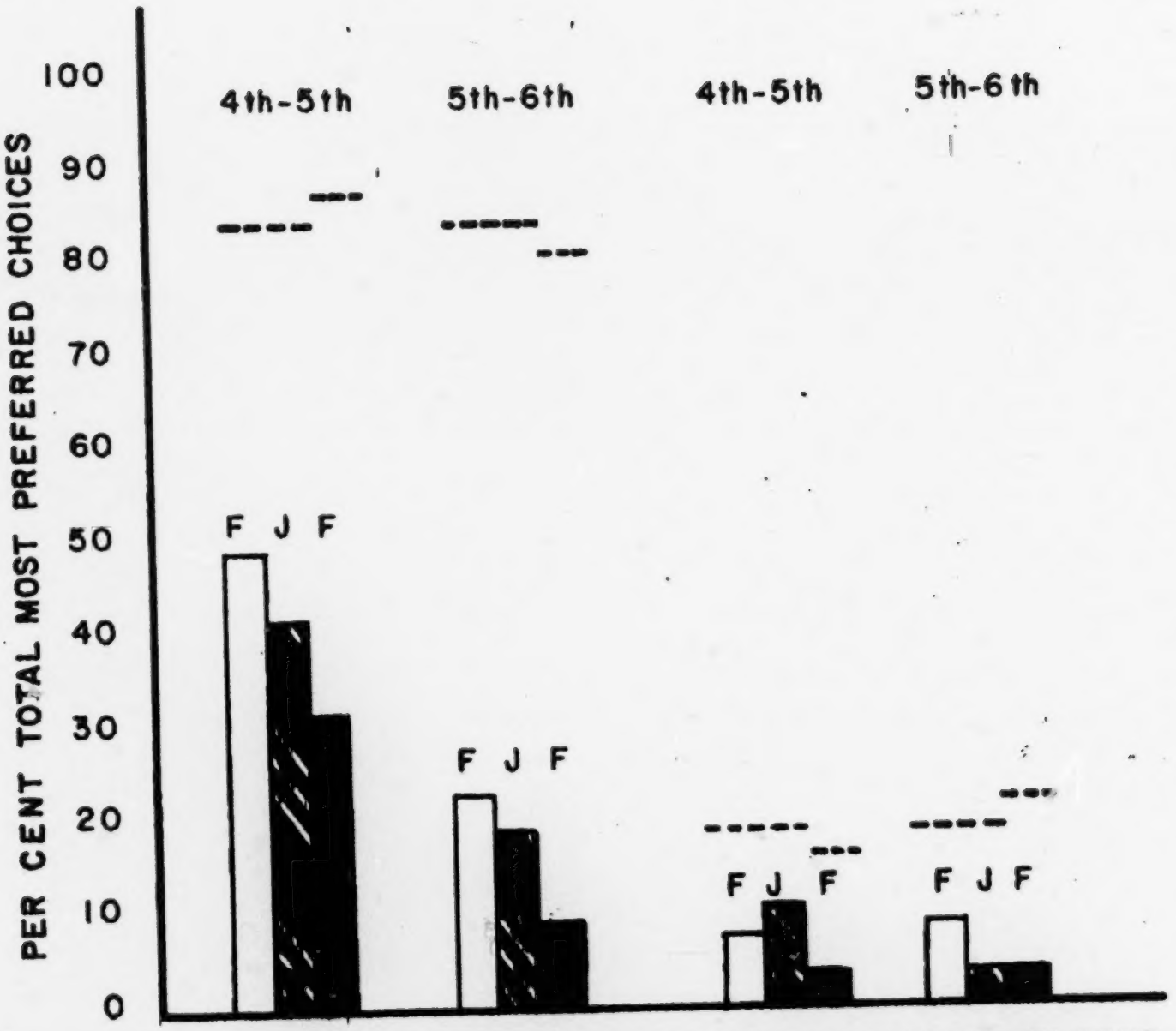

Figure 3. Most Preferred Choices of Members of Other Race

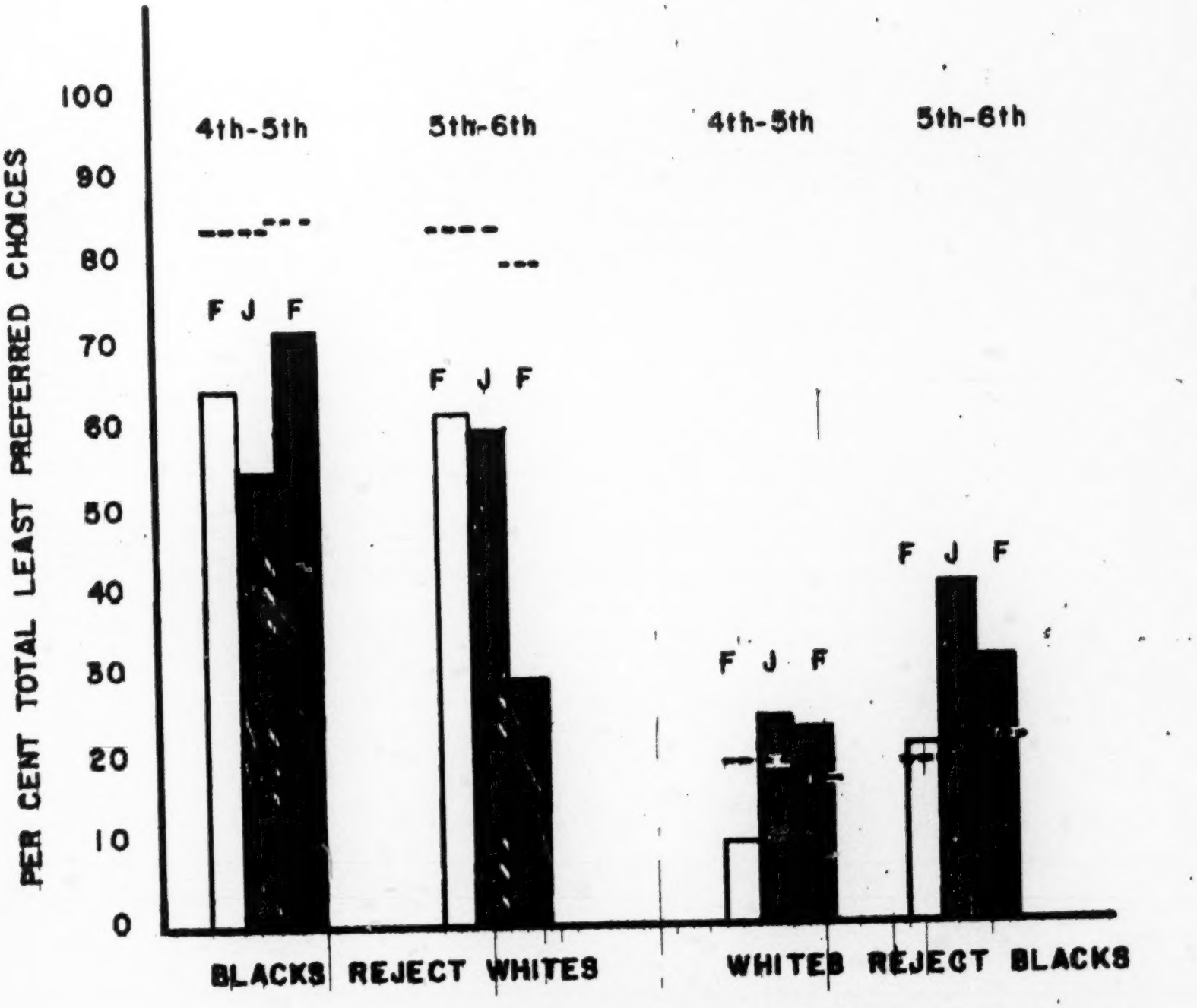

Figure 4. Least Preferred Choices (rejections) of Other Race

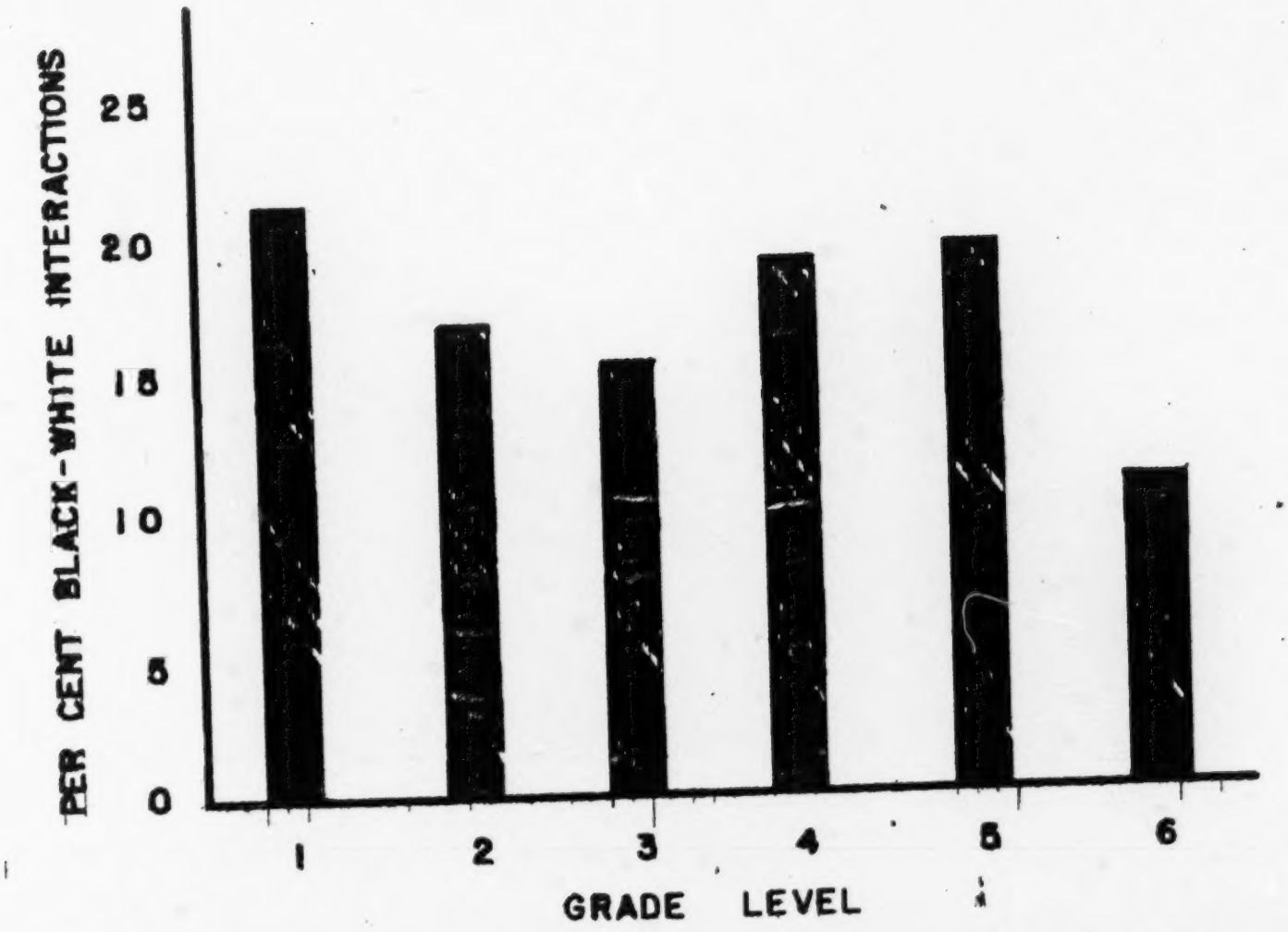

Figure 5. Proportion of Total Interactions that Were Black-White Interactions

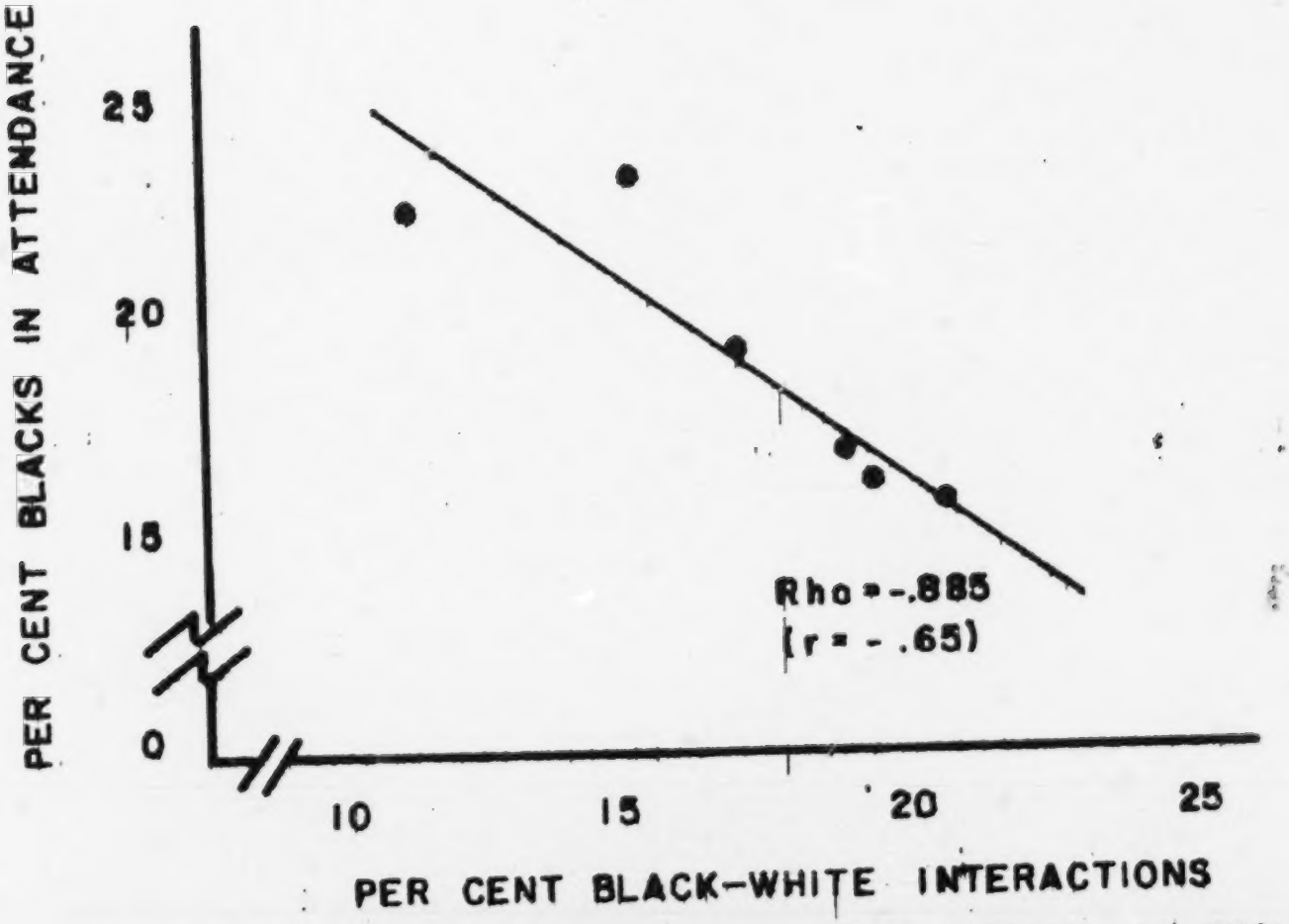

Figure 6. Relationship between Proportion of Blacks to Whites i Attendance and Per Cent Black-White Interactions